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Dental Student Attrition

1982/83

SUPPLEMENT 5
TO THE
ANNUAL REPORT 1983/84
DENTAL EDUCATION

DENTAL STUDENT ATTRITION

Each year the Division of Educational Measurements gathers student attrition data from the 60 U.S. dental schools by means of the Survey of Predoctoral Dental Educational Institutions as well as through withdrawal forms submitted for each of the students who withdraw from school. Students who repeat an academic year and students on temporary leave of absence are not included in these data. Between 1973 and 1979, the attrition rate after one full year of dental education was approximately 3.5% (see table 1). However, during the past three years the rate of attrition for the dental school freshmen has begun to climb, 4.30% in 1980-81, 4.95% in 1981-82 and 5.6% in 1982-83. During 1982-83, 155 sophomores (2.8% of the sophomore class) withdrew, while 79 withdrew from the junior class (1.4%) and 22 from the final year of dental education (0.4%). These 562 students amount to 2.53% of the total 1982-83 dental school enrollment.

Comparing the number of 1982-83 withdrawals with the number of students in their individual freshman classes permits a conclusion that an attrition rate of approximately 10 percent can be expected of a class of students for the four years of dental education. Although this is less than the 11.6% four year attrition rate of the 1966 entering class, this also represents a marked increase since 1979 (6.5%).

TABLE 1
DENTAL SCHOOL FRESHMAN CLASS ATTRITION
1973-74 TO 1982-83

ACADEMIC YEAR	FIRST-YEAR ENROLLMENT	TOTAL FIRST-YEAR WITHDRAWALS
1973-74		
% of Freshmen Enrollment	5,455	193
		3.54
1974-75		
% of Freshmen Enrollment	5,617	209
		3.72
1975-76		
% Of Freshmen Enrollment	5,763	200
		3.47
1976-77		
% of Freshmen Enrollment	5,935	200
		3.65
1977-78		
% of Freshmen Enrollment	5,954	200
		3.36
1978-79		
% of Freshmen Enrollment	6,301	230
		3.65
1979-80		
% of Freshmen Enrollment	6,132	216
		3.52
1980-81		
% of Freshmen Enrollment	6,030	259
		4.30
1981-82		
% of Freshmen Enrollment	5,855	290
		4.95
1982-83		
% of Freshmen Enrollment	5,498	306
		5.57

Personal Reasons for Withdrawal

Personal reasons for withdrawal have, in recent years, outnumbered academic reasons (see Table 2), while a change of career objective remains the most frequently reported personal reason for withdrawal from dental school (see Table 3). These students were in good academic standing and had no reported difficulty with coursework, but they withdrew to follow a career other than dentistry. During the 1982-83 year, 14 students left dental school explicitly to enter a medical school and 38 students left a particular dental school to transfer to another dental school. Eighteen of these 38 students were freshmen. Financial reasons were given for the withdrawal of only 4 freshmen, one sophomore, one junior and one senior.

Table 2
REASONS FOR FRESHMAN ATTRITION - 1978-83

	1978-79		1979-80		1980-81		1981-82		1982-83	
	#	%	#	%	#	%	#	%	#	%
Withdrawals for Personal Reasons	127	57.0	113	52.3	169	65.3	171	59.0	125	53.9
Withdrawals for Academic Reasons	96	43.0	103	47.7	90	34.7	119	41.0	107	46.1
Problems in Didactic Courses Only	55	24.7	59	27.3	48	18.5	71	24.5	59	25.4
Problems in Technic Courses Only	6	2.7	32	5.6	19	7.3	13	4.5	7	3.0
Problems in Didactic & Technic	35	15.7	32	14.8	23	8.9	35	12.1	41	17.7
Total Freshmen Withdrawals	223+	100.0	216	100.0	259	100.0	290	100.0	232*	100.0

\+ Does not include 7 withdrawals for unidentified reasons
* Does not include 74 withdrawals for unidentified reasons

PERSONAL REASONS*FOR WITHDRAWALS, 1982-83

	Freshmen	Sophmore	Junior	Senior	Total
Change of Career Objective	52	43	12	2	109
Other General Reasons	16	15	11	3	45
Transfer to Other Dental School	18	13	7	.	38
Family Problems	6	4	3	1	14
Poor Health	9	6	3	.	18
Disciplinary Suspension	5	2	2	1	10
Enter Medical School	4	7	2	1	14
Financial Problems	4	5	2	1	14
Lack of Interest	5	2	.	.	7
Emotional Problems	4	1	1	1	7

* Sometimes more than one reason was given per student

ACADEMIC REASONS

In annual studies of dental freshman attrition, a comparison between the DAT scores of students withdrawing because of academic problems and the DAT scores of all freshmen has been done. Since 1975, when this analysis was initiated, the studies indicated that the percentage of these students with below average DAT scores was significantly greater than the percentage of all freshmen with below average DAT scores. In this year's analysis, rather than percentages, the mean DAT scores are recorded. Again, there is a significant difference in the DAT scores of those who withdraw because of scholastic difficulty and the rest of the freshmen. The mean DAT Academic Average of those withdrawing for personal reasons was 4.57 (almost indentical to the mean for all freshmen, 4.59), those withdrawing because of problems in academics, however, have a significantly lower mean DAT Academic Average, 3.46. This difference is in evidence in the technic areas also. The mean Perceptual Ability Test score for those withdrawing for personal reasons was 4.51; for those withdrawing because of problems in technic courses, 3.68; all freshmen, 4.75. Figures 1 and 2 graphically portray these differences. Freshmen who withdraw because of problems in academic or technic coursework have, on the average, significantly lower DAT scores than other first-year students.

FIGURE 3

PLOT OF PERCENT OF DENTAL FRESHMEN WHO WITHDREW BECAUSE OF TECHNIC COURSE PROBLEMS. — — —

PLOT OF PERCENT OF DENTAL FRESHMEN WHO WITHDREW BECAUSE OF PERSONAL REASONS. ———

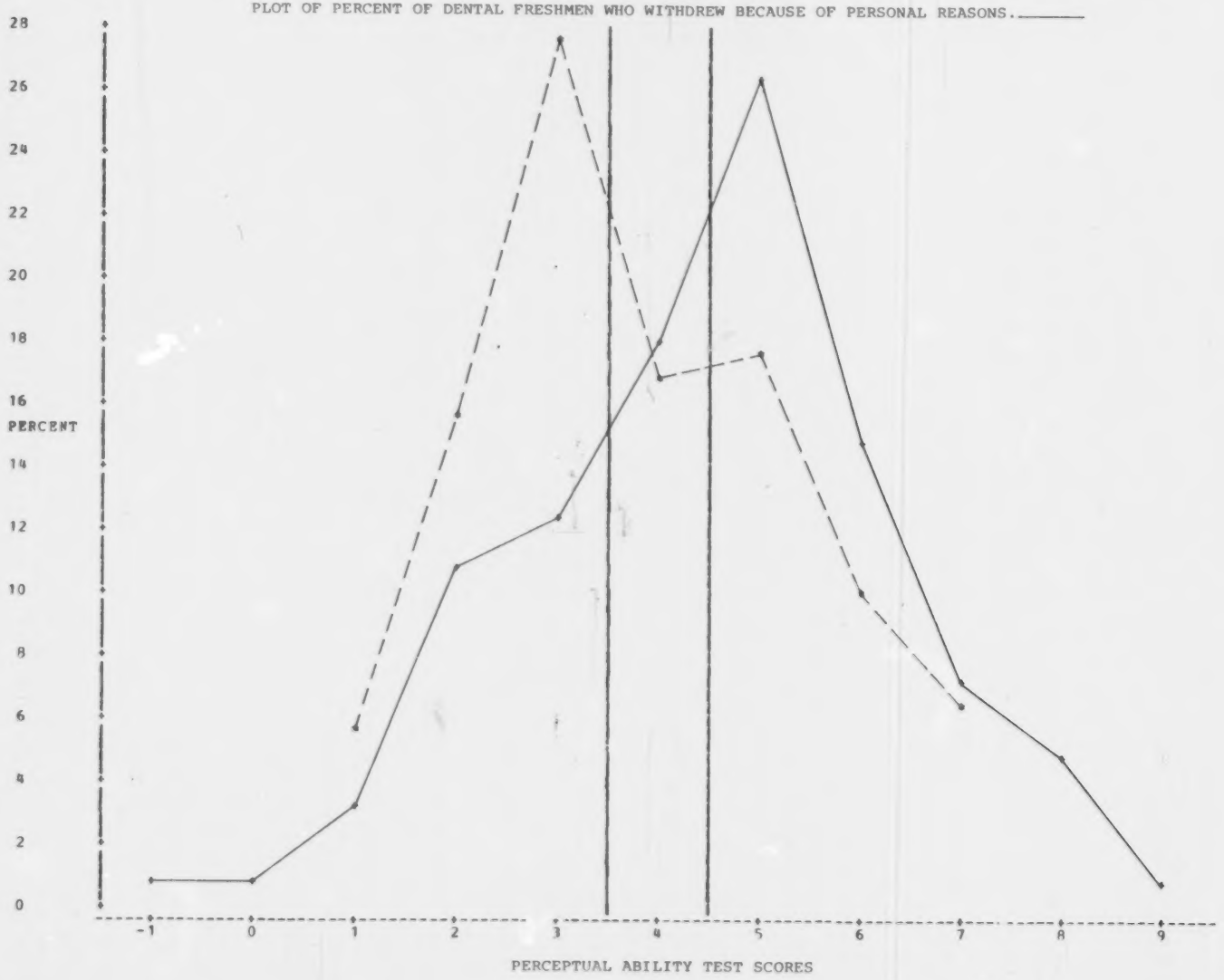
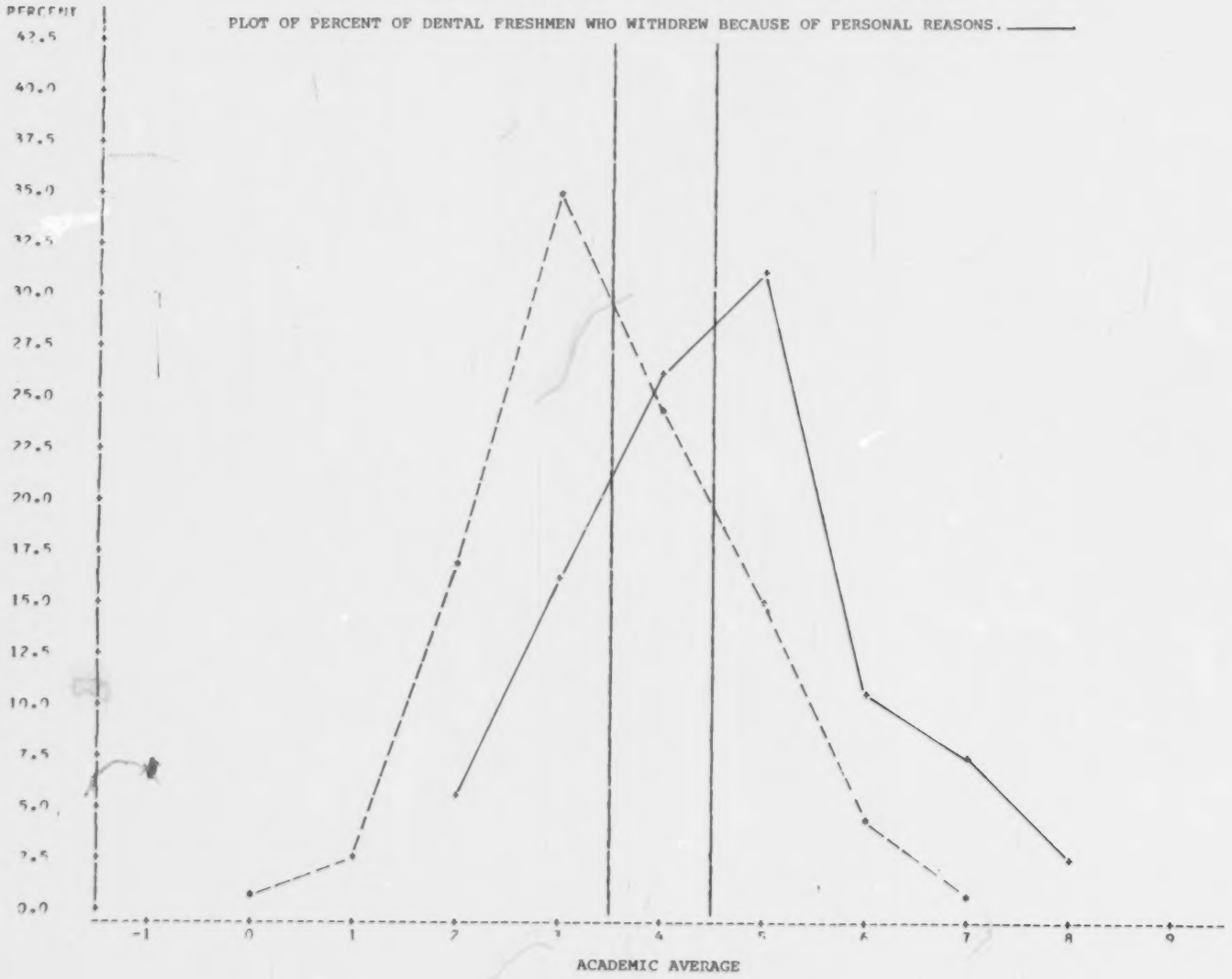


FIGURE 2

PLOT OF PERCENT OF DENTAL FRESHMEN WHO WITHDREW BECAUSE OF ACADEMIC PROBLEMS. — — —

PLOT OF PERCENT OF DENTAL FRESHMEN WHO WITHDREW BECAUSE OF PERSONAL REASONS. ———



MINORITY ATTRITION

In 1982 women constituted 22.2% of the entering class in U.S. dental school and 20.0% of the entire dental enrollment. Women, however, made up 27.8% of the first year withdrawals and 24.2% of the withdrawals from all four years. As can be seen from Table 4, the attrition rate for women in the first-year class is slightly higher than for men.

TABLE 4

SEX DIFFERENCES

ATTRITION, BY SEX, FROM TOTAL ENROLLMENT 1982-83

	Freshmen	Sophmore	Junior	Senior	Total
Male	221	122	62	21	426
% of Male Enrollment	5.2	2.8	1.3	0.5	2.4
Female	85	33	17	1	136
% of Female Enrollment	7.0	2.8	1.5	0.1	3.1
Total Attrition	306	155	79	22	562

TABLE 5

1981-82 FRESHMEN DENTAL STUDENTS

Race	#	% of Withdrawals	Total * 1st Year Enrollment	% of Enrolled
American Indian	1.00	0.40	21	0.36
Asian or Pacific Islander	15.00	6.05	373	6.44
Black	32.00	12.90	299	5.16
Hispanic	18.00	7.26	183	3.16
White	182.00	73.39	4,913	84.87

* Missing U of Puerto Rico

TABLE 6

1982-83 FRESHMEN DENTAL STUDENTS

Race	#	% of Withdrawals	Total * 1st Year Enrollment	% of Enrolled
American Indian	1.00	0.34	16	0.29
Asian or Pacific Islander	1.00	0.34	16	0.29
Black	38.00	12.79	289	5.32
Hispanic	18.00	6.06	187	3.44
White	224.00	75.42	4,554	83.82

* Missing U of Puerto Rico

An analysis of student attrition by ethnic minority categories indicates that Black and Hispanic students withdraw at a greater rate than White or Asian students. As Tables 5 and 6 indicate, Black students account for a disproportionately large percentage of withdrawals as compared to their percentage of enrollment. In 1981-82 Blacks made up 5.16% of the freshman class but 12.9% of

freshman attrition. In 1982-83 it was similar: 12.8% of attrition and 5.3% of enrollment. Hispanics fared similarly: in 1981-82, Hispanics made up 3.16% of dental freshmen but 7.26% of freshman withdrawals; in 1982-83, 3.44% of enrollment and 6.06% of attrition.

TABLE 7

Reason for Withdrawal

	Personal		Scholastic	
Race	#	% of Withdrawals	#	% of Withdrawals
American Indian	1	0.45	-	-
Asian or Pacific Islander	7	3.13	-	-
Black	8	3.57	23	10.27
Hispanic	4	1.79	11	4.91
White	98	43.75	72	32.14

Table 7 indicates that the greatest proportion of the 1982-83 freshman withdrawals of Blacks and Hispanics were for scholastic reasons related to course work. This is not the case for all withdrawals in general.

CONCLUSION

In summary, the freshman attrition rate which had been consistently held to approximately three and one half precent during the 1970's has increased to 5.6% in 1982-83. The national dental school entering class can be expected to experience approximately a 10% attrition rate by the time of graduation if one takes the 1982-83 rate of attrition as a base. The students withdrawing for personal, non-academic reasons continue to out-number those withdrawing because of academic problems. Freshmen withdrew from school more often because of academic problems in didactic courses than in technic courses, both areas of difficulty having a significant relationship to Dental Admission Test scores. Finally, the attrition rate for women, is slightly higher than for men in the first year classes, and also higher for Blacks and Hispanics than for all other freshmen.